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EACVI survey on investigations and imaging modalities in chronic coronary syndromes

Anda Bularga ^{1*}, Antti Saraste², Ricardo Fontes-Carvalho³, Espen Holte ^{4,5}, Matteo Cameli⁶, Blazej Michalski ⁷, Michelle C. Williams¹, Tomaz Podlesnikar ⁸, Antonello D'Andrea⁹, Ivan Stankovic¹⁰, Nicholas L. Mills ¹, Robert Manka¹¹, David E. Newby ¹, Jeanette Schultz-Menger^{12,13,14}, Kristina H. Haugaa^{15,16}, and Marc R. Dweck ¹

¹BHF Centre for Cardiovascular Science, Department of Cardiology, University of Edinburgh, Edinburgh, EH16 4SB, UK; ²Edinburgh, EH16 4SB, Heart Center, Turku University Hospital, Turku, 20520, Finland; ³Department of Cardiology, Cardiovascular Research and Development Unit (UnIC), Faculty of Medicine, University of Porto, Porto, 4200-319, Portugal; ⁴Department of Cardiology, St. Olavs Hospital, Trondheim, 7006, Norway; ⁵Department of Circulation and Medical Imaging, Norwegian University of Science and Technology NTNU, Trondheim, 7006, Norway; ⁶Department of Medical Biotechnologies, Division of Cardiology, University of Siena, Siena, 53100, Italy; ⁷Department of Cardiology, Medical University of Lodz, Lodz, 91-347, Poland; ⁸Department of Cardiac Surgery, University Medical Centre Maribor, Maribor, 2000, Slovenia; ⁹Unit of Cardiology, Department of Translational Medical Sciences, Monaldi Hospital, University of Campania 'Luigi Vanvitelli', Naples, 80121, Italy; ¹⁰Faculty of Medicine, Department of Cardiology, Clinical Hospital Centre Zemun, University of Belgrade, Belgrade, 11080, Serbia; ¹¹Department of Cardiology, University Heart Center, University Hospital Zurich, Zurich, 8091, Switzerland; ¹²Department of Cardiology and Nephrology, Charité Medical Faculty of the Humboldt University Berlin, Berlin, 13125, Germany; ¹³DZHK (German Centre for Cardiovascular Research), Partner Site Berlin, Berlin, 13125, Germany; ¹⁴Helios Clinics Berlin-Buch, Department of Cardiology, Berlin, 13125, Germany; ¹⁵Department of Cardiology, Oslo University Hospital, Oslo, 0424, Norway; and ¹⁶Institute for Clinical Medicine, University of Oslo, Oslo, 0318, Norway

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Aims

The European Association of Cardiovascular Imaging (EACVI) Scientific Initiatives Committee performed a global survey to evaluate current practice for the assessment and management of patients with suspected and confirmed chronic coronary syndromes.

Methods and results

One-hundred and ten imaging centres from 37 countries across the world responded to the survey. Most non-invasive investigations for coronary artery disease were widely available, except cardiovascular magnetic resonance (available 40% centres). Coronary computed tomography angiography (CCTA) and nuclear scans were reported by a multi-disciplinary team in only a quarter of centres. In the initial assessment of patients presenting with chest pain, only 32% of respondents indicated that they rely on pre-test probability for selecting the optimal imaging test while 31% proceed directly to CCTA. In patients with established coronary artery disease and recurrent chest pain, respondents opted for stress echocardiography (27%) and nuclear stress perfusion scans (26%). In asymptomatic patients with coronary artery disease and an obstructive (>70%) right coronary artery stenosis, 58% of respondents were happy to pursue medical therapy without further testing or intervention. This proportion fell to 29% with left anterior descending artery stenosis and 1% with left main stem obstruction. In asymptomatic patients with evidence of moderate-to-severe myocardial ischaemia (15%), only 18% of respondents would continue medical therapy without further investigation.

Conclusion

Despite guidelines recommendations pre-test probability is used to assess patients with suspected coronary artery in a minority of centres, one-third of centres moving directly to CCTA. Clinicians remain reticent to pursue a strategy of optimal medical therapy without further investigation or intervention in patients with controlled symptoms but obstructive coronary artery stenoses or myocardial ischaemia.

Keywords

coronary disease • stress testing • CT • survey • EACVI

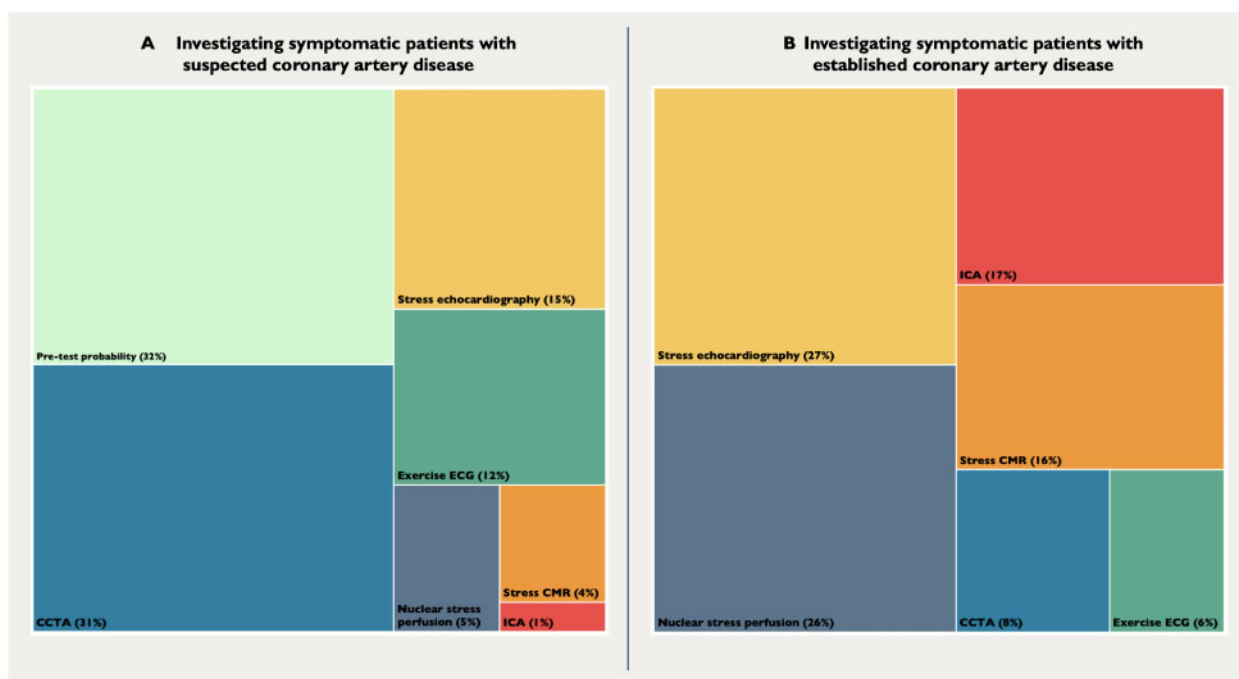
*Corresponding author. Tel: +44 788 524 7638. E-mail: anda.bularga@ed.ac.uk

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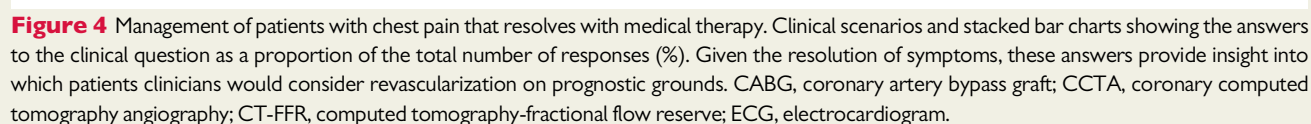
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Similarly, in a patient with controlled symptoms and mild reversible ischaemia (8% ischaemic myocardium) in the anterior wall, 61% of survey respondents would continue optimal medical therapy, while one-fifth would perform a CCTA (22%) and 16% would proceed straight to invasive coronary angiography and consider revascularization. In contrast, moderate-to-severe ischaemia on stress myocardial perfusion imaging (15% ischaemic myocardium) in the same patient was an indication for continuing medical therapy in 18% of survey respondents, with the same proportion (18%) opting for CCTA, and 63% proceeding straight to invasive angiography and revascularization (Figure 4).



In patients with previous coronary artery bypass graft surgery and recurrent angina, one-fifth of respondents indicated that they would pursue an initial trial of medical therapy before further investigation. Invasive coronary angiography was the preferred investigation in a



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Conflict of interest: None declared.

Data availability

The data underlying this article will be shared on reasonable request to the corresponding author and the EACVI.

References

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- Conflict of interest:** None declared.
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- References**
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